

NOTES

TWO NEW COMBINATIONS IN *Calochortus clavatus* (LILIACEAE).—Peggy L. Fiedler and Randy K. Zebell, Department of Biology, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132.

In preparation of the treatment of *Calochortus* for Volume II of the Flora of North America, it is necessary to provide taxonomic consistency in the infraspecific taxa of *C. clavatus* S. Watson. Two new combinations are formally made herein: *Calochortus c. var. pallidus* and *Calochortus c. var. recurvifolius*.

Calochortus clavatus was described from San Luis Obispo County, California, by Watson in 1879 (Proceedings of the American Academy XIV, 265). In 1925 Jepson described the first infraspecific segregate, *Calochortus c. var. avius* (Manual of the Flowering Plants of California, University of California Press, Berkeley, CA) from El Dorado County, California. Ownbey (A monograph of the genus *Calochortus*, Annals of the Missouri Botanical Garden 27:371–556, 1940) subsumed var. *avius* under var. *clavatus*. Ownbey also described a new entity, var. *gracilis* endemic to the San Gabriel Mountains. Hoover, who recognized sect. *Mariposa* as a genus, subsequently described two additional infraspecific taxa of *clavatus*, var. *pallida* and var. *recurvifolia*, (Leaflets of Western Botany, X(8):126, 1964). Munz (Supplement to a California Flora. University of California Press, Berkeley, CA, 1968) later recognized these latter two taxa as subspecies.

We recognize all five infraspecific taxa of *C. clavatus* and propose the following two new combinations so that all infraspecific taxa in *C. clavatus* are of equivalent nomenclatural rank.

1. *Calochortus clavatus* var. *pallidus* (Hoover) Fiedler and Zebell, comb. nov. *Mariposaclavata* var. *pallida* Hoover, Leaflets of Western Botany, X(8):126, 1964.—TYPE: UNITED STATES, California: San Luis Obispo Co: Summit of La Panza Range, Pozo-Simmmler Road, 30 June 1955, Hoover 8362 (holotype: OBI!).
2. *Calochortus clavatus* var. *recurvifolius* (Hoover) Fiedler & Zebell, comb. nov. *Mariposaclavata* var. *recurvifolius* Hoover, Leaflets of Western Botany, X(8):126, 1964.—TYPE: UNITED STATES, California: San Luis Obispo Co: in heavy clay soil on ocean bluff, 3 km north of Arroyo de la Cruz on state Highway No. 1, 17 July 1954, Hoover 8349 (holotype: OBI!).

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THE STATUS OF *CASTILLEJA ATTENUATA* (SCROPHULARIACEAE) IN ARIZONA.—Mark Egger, Herbarium (WTU), Department of Botany, University of Washington, Seattle, Washington 98195.

Castilleja attenuata (A. Gray) Chuang & Heckard (previously known as *Orthocarpus attenuatus* A. Gray) is a widespread species of lowland valley and lower foothill grasslands of the Pacific slope of the western cordillera of North America from southern British Columbia to northern Baja California. A population, probably of an introduced origin, has become established on the lower Pacific slope of the Andes Mountains in southern Peru and northern Chile (Chuang and Heckard, Systematic Botany 17(3):417–431, 1992).

The fact that *Castilleja attenuata* occurs also in Arizona is not recorded in the literature until 1979 (Pinkava, Reeves, Lehto, and McGill, Journal of the Arizona-Nevada Academy of Science 14(2):37). No other published account of *C. attenuata*